

REMARKS

I. Claim Objections

In the Office Action dated January 7, 2008, the Examiner objected to claim 1 because of the following informalities: the Examiner asserted that it is unclear what is meant by the phrase "converts a sensor signal into a discrete level signal" and what is a dynamic threshold input. The Examiner indicated that appropriate correction is required.

The Examiner also objected to claim 14, asserting that it is unclear what is a discrete level signal and what is a startup delayed threshold input. The Examiner indicated that appropriate correction is required.

The Examiner further objected to claim 16, asserting that it is unclear what is meant by the phrase "converting a sensor signal into a discrete level signal" and what is a specified startup delay. The Examiner indicated that appropriate correction is required.

The Applicant has therefore amended the claims to correct such informalities. For example, the terminology "converts a sensor signal into a discrete level signal" has been amended to clarify that the conversion of the sensor signal results in a digitized signal. This is consistent with and taught by Applicant's specification. See, for example, paragraph [0024] of Applicant's specification, which indicates that "...As utilized herein the term "detector" is used to designate an integrated device or assembly of electronic components designed to convert an input analog signal into a "detected" discrete level (i.e. digitized) signal...the detection function is typically accomplished as a voltage comparison such as may be accomplished by the use of a comparator and associated circuit components." Additionally, the phrase "dynamic DC threshold input" has been amended to clarify the dynamic DC threshold input as constituting a dynamic DC threshold input voltage that is adaptively set to effectively filter low frequency components caused by a variable

DC offset. Such amended features are consistent with and taught by Applicant's specification (see, for example, paragraph [0030] of Applicant's specification).

Additionally, claim 16 has been amended to clarify that the terminology "specified startup delay" substantially corresponds to a charge-up period experienced by the AC-coupled detector. This is also consistent with and taught by Applicant's specifications (see, for example, paragraph [0033] of Applicant's specification).

Based on the foregoing, the Applicant submits that the objections to claims 1, 14, and 16 have been traversed. Applicant therefore respectfully requests withdrawal of the aforementioned objections to claims 1, 14, and 16, because the appropriate correction to the identified informalities has been achieved via the claim amendments provided herein.

II. Allowable Subject Matter

In the Office Action dated January 7, 2008, the Examiner indicated that claims 1-13, 14-15, and 16-22 are allowable over the prior art. The Examiner provided a statement of reasons for the indication of the allowable subject matter.

Regarding claims 1-13, the Examiner indicated that the prior art fails to show an AC-coupled detector including a dynamic DC-threshold input; and a disable device that inhibits the DC-coupled detector responsive to the dynamic DC threshold input reaching a specified threshold voltage level. The Examiner indicated that these features taken together with the other limitations of the claims render the claims allowable over the prior art. The Applicant agrees with this assessment.

Regarding claims 14 and 15, the Examiner indicated that the prior art fails to show a DC-coupled detector that converts the amplified sensor output signal into a discrete level signal that is output from said switched-mode detector, said switched mode detector further having an AC-coupled output mode wherein an AC-coupled detector converts the amplified sensor output signal into a discrete level signal that

is output from said switched-mode detector wherein the output of said switched-mode detector switches from the DC-coupled output mode to the AC-coupled output mode responsive to a startup delayed threshold input reaching a specified voltage level. The Examiner indicated that these features together with the other limitations of the claims render the claims allowable over the prior art. The Applicant agrees with this assessment.

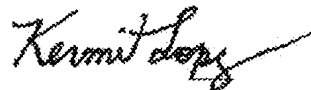
Regarding claims 16-22, the Examiner indicated that the prior art fails to shown an AC-coupled detector for converting the sensor signal into a discrete level signal output from the signal conditioning circuit; and a device that selectively inhibits the discrete level output from said DC-coupled detector after a specified start-up delay. The Examiner indicated that these features together with the other limitations of the claims render the claims allowable over the prior art. The Applicant agrees with this assessment.

III. Conclusion

In view of the foregoing discussion, the Applicant has responded to each and every objection of the Official Action. The Applicant has clarified the structural distinctions of the present invention via the claim amendments and remarks provided herein. Applicant respectfully requests the withdrawal of the objections based on the preceding remarks. Applicant submits that the claims as amended are now in condition for allowance. Reconsideration and allowance of Applicant's application is also respectfully solicited.

Should there be any outstanding matters that need to be resolved, the Examiner is respectfully requested to contact the undersigned representative to conduct an interview in an effort to expedite prosecution in connection with the present application.

Respectfully submitted,



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